

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in this Patent Application:

Claims 1 to 12. (canceled)

13. (currently amended) A method for producing a mold by computer-aided design including a preliminary step in which body portions of the mold are broken down into elementary strata, followed by steps including manufacture of the elementary strata to form manufactured strata and reconstruction of the mold by superposing and assembling the manufactured strata, wherein the method comprises the steps of:

defining a fluid transport circuit in the mold;

breaking [[-]] down the fluid transport circuit into a plurality of elementary chambers as part of the break-down of the mold and during the break-down of the mold;

producing the elementary chambers in the manufactured strata during the manufacture of the manufactured strata; and

completely reconstructing the fluid transport circuit during the superposition and the assembly of the manufactured strata;

breaking [[-]] down an isolating circuit coupled with the fluid transport circuit into a plurality of elementary isolating chambers as part of the break-down of the mold and

during the break-down of the mold;

producing the elementary isolating chambers in the manufactured strata during the manufacture of the manufactured strata, simultaneously producing the elementary chambers and the elementary isolating chambers during the manufacture of the manufactured strata;

reconstructing the isolating circuit during the superposition and the assembly of the manufactured strata, wherein the elementary isolating chambers are placed in fluid-tight communication, simultaneously producing the fluid transport circuit and the isolating circuit; and

[[and]] combining the elementary isolating chambers of the isolating circuit to form a thermal barrier between the fluid transport circuit and side and bottom portions of the mold.

Claims 14 to 25. (canceled)

26. (previously presented) The method of claim 13 wherein the elementary chambers are produced in the manufactured strata before the manufactured strata are reconstructed to form the fluid transport circuit.

27. (previously presented) The method of claim 13 which further includes the step of combining the elementary chambers of the fluid transport circuit to form a cooling circuit in the body of the mold.

28. (previously presented) The method of claim 27 which further includes the step of combining the elementary chambers of the fluid transport circuit to form a three-dimensional network of channels in the body of the mold.

29. (previously presented) The method of claim 27 which further includes the step of combining the elementary chambers of the fluid transport circuit to form a layer-shaped chamber in the body of the mold.

30. (previously presented) The method of claim 13 wherein the step of producing the elementary chambers in the manufactured strata further includes the step of forming the elementary chambers in surface portions of the manufactured strata, to a depth which is less than a defined thickness of the manufactured strata.

31. (previously presented) The method of claim 30 which further includes the step of combining the elementary chambers of the fluid transport circuit with surface portions of adjacent manufactured strata, to form the fluid transport circuit.

Claim 32. (canceled)

33. (previously presented) The method of claim 13

which further includes the step of forming the thermal barrier as a continuous thermal barrier.

34. (previously presented) The method of claim 33 which further includes the step of combining the elementary isolating chambers of the isolating circuit to form a network of follower channels in the body of the mold.

35. (previously presented) The method of claim 33 which further includes the step of combining the elementary isolating chambers of the isolating circuit to form a layer-shaped chamber in the body of the mold.

Claims 36 and 37. (canceled)

38. (previously presented) The method of claim 13 which further includes the step of uniformly spacing the isolating circuit from the fluid transport circuit.

39. (previously presented) The method of claim 13 which further includes the step of providing the isolating circuit with a uniform thickness.

Claims 40 to 42. (canceled)